

RH INCOMPATIBILITY

(Erythroblastosis Fetalis)



BASIC INFORMATION

DESCRIPTION

Incompatibility between an infant's blood type and that of its mother, resulting in destruction of the infant's red blood cells (hemolytic anemia) during pregnancy and after birth by antibodies from its mother's blood.

FREQUENT SIGNS AND SYMPTOMS

Signs during pregnancy:

- Decreased fetal growth.
- Decreased fetal movement.

Signs in a newborn:

- Paleness.
- Jaundice (yellow skin and eyes) that begins within 24 hours after delivery.
- Unexplained bruising or blood spots under the skin.
- Tissue swelling (edema).
- Breathing difficulty.
- Seizures.
- Lack of normal movement.
- Poor reflex response.

CAUSES

The fetus of an Rh-negative (blood type) mother and an Rh-positive father may be Rh-positive. During delivery, a small amount of the infant's blood is absorbed by the mother through the placenta, stimulating her body to produce antibodies against Rh-positive blood. The antibodies are produced after delivery, so the first infant is not affected. With succeeding pregnancies, the antibodies in the mother's blood destroy fetal blood cells. During pregnancy, anti-Rh antibodies cross the placenta and destroy fetal blood cells. The resulting anemia can be severe enough to cause fetal death. If the fetus survives, antibodies can cross to baby during the birth process, producing jaundice and other symptoms shortly after birth.

RISK INCREASES WITH

- Each pregnancy after the first involving different blood types.
- Previous blood transfusions. These might have contained unidentified, incompatible blood types.

PREVENTIVE MEASURES

- Obtain prenatal care throughout pregnancy. Medical supervision early in pregnancy is essential to determine the risk of Rh incompatibility.
- Special anti-Rh gamma globulin is given to the mother at 28 weeks' gestation and within 72 hours after delivery, miscarriage, ectopic pregnancy or abortion. This prevents formation of antibodies that might affect future infants.
- Amniocentesis beginning at 28 weeks if indicated by elevated antibody titers in the mother.

EXPECTED OUTCOMES

With prompt recognition of the disorder, damage to the infant can be prevented with exchange transfusions.

POSSIBLE COMPLICATIONS

- Permanent neurological damage, such as cerebral palsy or hearing loss (rare).
- Blood-transfusion reaction.



TREATMENT

GENERAL MEASURES

- Blood tests to type the mother's, father's and infant's blood, measure the mother's Rh-positive antibodies and detect hemolytic anemia in the infant's blood.
- Amniocentesis (a small amount of amniotic fluid is withdrawn from amniotic sac that surrounds unborn child in the uterus for diagnostic procedure).
- Intrauterine transfusions (sometimes).
- Transfusion to exchange completely the infant's blood after birth.
- Hospitalization. The newborn child will remain in the hospital up to 2 weeks after an exchange transfusion.

If you have an Rh-negative blood type:

- Tell any doctor or medical professional who treats you. Make sure this information is in your medical records.
- Wear a medical alert type bracelet or pendant identifying your medical problem.

MEDICATIONS

If you are pregnant and have Rh-negative blood type, you will be prescribed an anti-Rh gamma globulin injection at 28 weeks and again within 72 hours after delivery or termination of a pregnancy for any reason. You may also have antibody titer drawn during pregnancy to see if you are producing anti-Rh antibodies.

ACTIVITY

No restrictions after treatment.

DIET

The infant may be breast-fed or bottle-fed normally.



NOTIFY OUR OFFICE IF

Your baby has any of the following after returning home:

- Fever.
- Jaundice.
- Poor appetite or poor weight gain.
- Excessive crying that does not stop when the baby is held.